

ABSTRACT OF THE DISCLOSURE

When a communication is started through a control channel in a half-duplex communication compliant with
5 the Recommendation V.34, the modem apparatus of the present invention demodulates reception symbols subjected to quadrature amplitude modulation and thereby finds their coordinates on a signal space diagram. Then, the modem apparatus calculates a cross product of two
10 vectors from the origin to the coordinates of two consecutive symbols and identifies a control signal from a polarity array configured by polarities of the calculation result arrayed over a span of a plurality of consecutive symbols.

15

T022200-60241860